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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/532,023	04/20/2005	Kazuya Maekawa	APA-0220	6143
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Washington, DC 20036				
EXAMINER				
DENTER, CLARK F				
ART UNIT		PAPER NUMBER		
3724				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/532,023

Applicant(s)

MAEKAWA ET AL.

Examiner

Clark F. Dexter

Art Unit

3724

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 January 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 3-12 is/are pending in the application.
- 4a) Of the above claim(s) 3, 4, 6, 7, 11 and 12 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 5 and 8-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 May 2008 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. The amendment filed on January 28, 2010 has been entered. It is respectfully submitted that the indicated allowability of the claims is withdrawn in view of the newly discovered reference(s) to Wakayama et al., Pub. No. 2004/0154456. Rejections based on the newly cited reference(s) follow. The Examiner regrets any inconvenience caused by this action and accordingly this Office action is being made **non-final**.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 1, 5 and 8-10 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Wakayama et al., pub. No. 2004/0154456 (hereafter Wakayama '456).

Wakayama '456 discloses a device on which almost every step of the claimed method is performed (except that which is grayed-out and struck-through) including:

forming at least one scribe line (e.g., L1-L3, Fig. 21) in a first direction by a scribe means (e.g., including 78) to generate a high-penetration vertical crack in the first direction in the brittle material substrate, and

forming at least one scribe line (e.g., L4-L6, Fig. 21) in a second direction by said scribe means to generate a high-penetration vertical crack in the second direction in the brittle material substrate,

wherein said at least one scribe line in the second direction intersects with said at least one scribe line of the first direction,

wherein the formation of the intersection between the scribe line in the second direction and the scribe line of the first direction occurs without the scribe means being pressed against an existing scribe line in the brittle material substrate (e.g., as described in paragraphs 0021 and 0022, wherein it is described that the cutter head is caused to jump up when crossing existing scribing lines), and

wherein, in the formation of at least one scribe line in a second direction, the scribe means presses against the brittle material substrate at a scribe start position and a scribe stop position which are set at a distance of 0.5 to 0.7 mm from the scribe line of the first direction;

[claim 5] wherein the scribe means generates the high-penetration vertical crack by applying impacts of a short period to the point on the surface of the brittle material substrate (e.g., the impact(s) when the scribe means lands after the jump);

[claim 8] wherein the scribe means presses against the brittle material substrate at the scribe start position or the scribe stop position at a location which is within an advance distance of the vertical crack and which is distant from the existing scribe line;

[claim 9 (from 8)] wherein the scribe means does not press against the existing scribe line in the brittle material substrate in a vicinity around the existing scribe line.

Wakayama '456 lacks an explicit disclosure of the specific distance as follows:

[from claim 1] which are set at a distance of 0.5 to 0.7 mm from the scribe line of the first direction;

[claim 10 (from 9)] wherein the vicinity around the existing scribe line comprises a distance of 0.5 to 0.7 mm on either side of the existing scribe line.

However, because the distance is not recited in proportion to any other features of the invention, the recited distance will be met if the claimed invention is made to the appropriate scale. The Examiner takes Official notice that it is old and well known in the art to make such inventions of varying scales to perform various scribing operations on varying sizes of workpieces. Therefore, it would have been obvious to one having ordinary skill in the art to make a scribing device that meets the recited distance for at least the reason described above.

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Clark F. Dexter whose telephone number is (571)272-4505. The examiner can normally be reached on Mondays, Tuesdays, Thursdays and Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Boyer D. Ashley can be reached on (571)272-4502. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

**/Clark F. Dexter/
Primary Examiner, Art Unit 3724**

cfd
February 26, 2010